

ICON[®] Instrumentation Cable

Zero Halogen, Flame Retardant

EN 50288-7
90 °C / 300 V

Single & Multi-Triple, XLPE-Insulation, Collective Screen, LSZH-Sheath

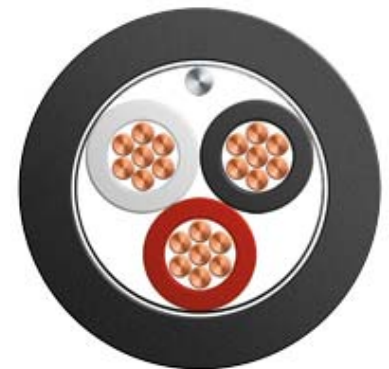
RE-2X(St)H

Application

For transmission of analogue and digital signals in instrument and control systems; allowed for use in zone 1 and zone 2 group II classified areas (IEC 60079-14); not allowed for direct connection to low impedance source, e.g. the public mains electricity supply.
Recommended for indoor and outdoor installation, on racks, trays, in conduits, in dry and wet locations; not for direct burial.
Recommended for use as fire protection measure for people and important material assets.

Construction

Conductor.....	plain annealed copper, 7 stranded, size, 0.5 mm ² , 0.75 mm ² , 1 mm ² , 1.3 mm ² , 1.5 mm ²
Insulation.....	cross-linked polyethylene XLPE
Colour code.....	black / white / red, continuously numbered on white core (1, 2..) for multitruples
Wrapping.....	at least 1 layer of plastic tape
Collective screen.....	24 µm aluminium PETP tape over 7-stranded tinned copper drain wire, 0.5 mm ²
Outer sheath.....	zero halogen flame retardant compound LSZH, black; blue for intrinsically safe systems
Cable marking.....	LEONI KERPEN ICON INSTRUMENTATION CABLE 300 V LSZH EN 50288-7 CE PLC LM



Technical data

Flame propagation	
Test on single cable	IEC 60332-1-2
Test on bunched cables	IEC 60332-3-24 (Cat. C)
Amount of halogen acid gas	IEC 60754-1 (0%)
Degree of acidity of gases	IEC 60754-2 (pH > 4.3, C < 10µS/mm)
Smoke density	IEC 61034-2 (L.T. > 60%)
Sunlight resistance	UL 1581 section 1200
Oil resistance	ICEA S-73-532*

Temperature range:
-30 °C up to 90 °C (during operation)
-5 °C up to 50 °C (during installation)
Min. bending radius:
7.5 x cable-Ø

Abbreviations

RE-	Instrumentation Cable
2X	insulation of XLPE
(St)	collective screen
H	LSZH Sheath
PLC	Production Lot Code
LM	Length Marking

Electrical data at 20 °C

	nom.	mm ²	0.5	0.75	1	1.3	1.5
Conductor	nom.	mm ²	0.5	0.75	1	1.3	1.5
Conductor resistance	max.	Ω/km	36.7	25.0	18.5	14.2	12.3
Insulation resistance	min.	MΩ x km	5000				
Mutual capacitance	max.	nF/km					
single triple:			115	115	115	115	115
up to 4 triples:			90	90	90	102	102
above 4 triples:			75	75	75	85	85
Inductance	max.	mH/km	1				
L/R (ratio)	max.	µH/Ω	25	25	25	40	40
Test voltage U _{rms} (core : core)		V	1500				
Test voltage U _{rms} (core : screen)		V	1500				
Operating voltage		V	300				

ICON[®] Instrumentation Cable Zero Halogen, Flame Retardant

EN 50288-7
90 °C / 300 V

Single & Multi-Triple, XLPE-Insulation, Collective Screen, LSZH-Sheath

RE-2X(St)H

Geometrical data

No. of elem.	RT of insulation nom. mm	RT of outer sheath nom. mm	Overall diameter approx. mm	Cable weight approx. kg/km	Part. No. Colour black
0.5 mm²/7					
1	0.35	0.8	5.4	45	7076E316
2	0.35	0.9	8.4	91	7076E319
4	0.35	1.0	9.8	123	7076E322
5	0.35	1.0	10.8	155	7076E325
6	0.35	1.0	12.1	185	7076E328
8	0.35	1.1	13.1	221	7076E331
10	0.35	1.1	14.7	275	7076E334
12	0.35	1.1	15.2	316	7076E337
16	0.35	1.2	17.4	414	7076E340
20	0.35	1.2	19.1	508	7076E343
24	0.35	1.3	20.9	594	7076E346
0.75 mm²/7					
1	0.38	0.9	6.1	59	7076E349
2	0.38	0.9	9.3	114	7076E352
4	0.38	1.0	10.9	163	7076E355
5	0.38	1.0	12.0	199	7076E358
6	0.38	1.1	13.7	245	7076E361
8	0.38	1.1	14.7	296	7076E364
10	0.38	1.2	16.7	366	7076E367
12	0.38	1.2	17.3	423	7076E370
16	0.38	1.3	19.7	555	7076E373
20	0.38	1.3	21.7	681	7076E376
24	0.38	1.4	23.7	802	7076E379
1 mm²/7					
1	0.4	0.9	6.6	66	7076E382
2	0.4	1.0	10.4	135	7076E385
4	0.4	1.0	11.9	202	7076E388
5	0.4	1.0	13.2	251	7076E391
6	0.4	1.1	15.0	303	7076E394
8	0.4	1.1	16.1	379	7076E397
10	0.4	1.2	18.4	461	7076E400
12	0.4	1.2	19.0	544	7076E403
16	0.4	1.3	21.7	717	7076E406
20	0.4	1.4	24.1	880	7076E409
24	0.4	1.4	26.1	1048	7076E412

ICON[®] Instrumentation Cable
Zero Halogen, Flame Retardant

EN 50288-7
90 °C / 300 V

Single & Multi-Triple, XLPE-Insulation, Collective Screen, LSZH-Sheath

RE-2X(St)H

Geometrical data					
No. of elem.	RT of insulation nom. mm	RT of outer sheath nom. mm	Overall diameter approx. mm	Cable weight approx. kg/km	Part. No. Colour black
1.3 mm²/7					
1	0.45	0.9	7.2	86	7076E415
2	0.45	1.0	11.5	175	7076E418
4	0.45	1.1	13.4	258	7076E421
5	0.45	1.1	14.8	318	7076E424
6	0.45	1.2	16.9	387	7076E427
8	0.45	1.2	18.1	474	7076E430
10	0.45	1.3	20.7	589	7076E433
12	0.45	1.3	21.4	695	7076E436
16	0.45	1.4	24.4	918	7076E439
20	0.45	1.5	27.1	1124	7076E442
24	0.45	1.6	29.6	1336	7076E445
1.5 mm²/7					
1	0.45	0.9	7.5	95	7076E448
2	0.45	1.0	11.9	191	7076E451
4	0.45	1.1	14.0	287	7076E454
5	0.45	1.1	15.4	355	7076E457
6	0.45	1.2	17.6	432	7076E460
8	0.45	1.3	19.1	540	7076E463
10	0.45	1.3	21.6	672	7076E466
12	0.45	1.4	22.5	779	7076E469
16	0.45	1.5	25.7	1031	7076E472
20	0.45	1.6	28.6	1265	7076E475
24	0.45	1.7	31.1	1508	7076E478

RT = Radial Thickness